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10/024,000	12/21/2001	Hiroyuki Suzuki	032360-014	8179

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EXAMINER
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THOMPSON, JAMES A

ART UNIT	PAPER NUMBER
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2625

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed 15 January 2009 have been fully considered but they are not persuasive.

**Regarding page 8, line 1 to page 9, line 7:** *Applicant argues* that only one count is performed in Kumashiro (US-5,341,227), rather than two as asserted by Examiner, and cites column 1, lines 55-60 of Kumashiro as evidence of Kumashiro allegedly having only one counter.

*Examiner replies* that the portion cited by Applicant does not relate to the counters discussed by Examiner. Further column 1, lines 55-60 of Kumashiro do not categorically state that there is only one counter in Kumashiro of the type discussed by Examiner. Rather, the cited portion of Kumashiro discusses the problems of the prior art, namely that one counter is required for the main scan direction and a separate counter is required for the sub-scan direction. This is different from the counters discussed by Examiner. As shown by figure 11([b] & [c]), as well as column 13, lines 1-5 and lines 11-16 of Kumashiro, a count is performed in which the number of maximum halftone density pixels in a 15x5 pixel region detected. Thus, we have the first recited counter. Then, as shown by figure 11([c] & [f]), as well as column 13, lines 5-10 and lines 16-20 of Kumashiro, the beginning points of the edges are then flagged and counted. Thus, we have the second recited counter. The counting functions are performed, as are other operations, by embodied software executed by a computer processor [see column 3, line 68 to column 4, line 2 of Kumashiro]. Thus, the first counter and second counter are each simply the corresponding portions of the embodied software.

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**Regarding page 9, lines 8-21:** *Applicant argues* that Kumashiro does not disclose a first counter that counts the number of halftone dot characteristics that exist in a first region including a target pixel from among halftone dot characteristics detected by the halftone dot characteristic detecting section. Applicant then provides alleged contrasts between Kumashiro and Applicant's invention as disclosed in the present application.

*Examiner replies* that Applicant does not address the particular portions cited by Examiner in the final office action of 21 October 2008. Examiner cited figures 11([b] & [e]); and column 13, lines 1-5 and lines 11-16 of Kumashiro to teach the disputed language. Parts b and e of figure 11 of Kumashiro show that, for a large number of maximum detection flags, there is a dot image. Thus, the characteristics counted in column 13, lines 1-5 and lines 11-16 of Kumashiro are for the detection of whether or not there is a halftone dot image. Examiner also respectfully reminds Applicant that, although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

**Regarding page 9, line 22 to page 10, line 17:** *Applicant argues* that Kumashiro does not teach the recited edge pixel detection section.

*Examiner replies* that the second count, as shown graphically in parts c and f of figure 11 of Kumashiro, determines the number of points in a region that begin a run of continuous points. A small count of such beginning points demonstrates that the beginning points are the beginnings of an edge, such as the edges of the character shown in figure 11 of Kumashiro. Therefore, the recited edge pixel detection section is fully taught by Kumashiro.

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**Regarding page 10, line 18-19:** Examiner has demonstrated that claim 1 is fully taught by Kumashiro. Therefore, claims 8 and 14 cannot be considered allowable based on the use of the same reasoning Applicant proffers for claim 1.

**Regarding page 10, line 20 to page 12, line 7:** *Applicant argues* that Fujiwara (US-4,813,078) is not properly combinable with Kumashiro and allegedly would not produce the system recited in claim 3.

*Examiner replies* that both Kumashiro and Fujiwara teach counting various properties over the various pixel positions in an image region based on the pixel values at those positions. Kumashiro already performs various counts. By combining Kumashiro with Fujiwara, a different count would be performed in a different way. Specifically, separate thresholds would be used for the first count and the second count in discriminating the target pixel. The first threshold relates to the number of black picture elements that trigger a recognition of a part of a character corresponding to the particular subregion [see figures 10a-10b and column 6, lines 35-48 of Fujiwara]. The second threshold relates to the number of continuous boundary points which indicate a direction, which relates to the recognition of a part of a character corresponding to the particular subregion [see figure 6 and column 6, lines 6-14 of Fujiwara]. Kumashiro already teaches the use of two counts, as discussed above. The first count and the second count each teach distinguishing between various properties of the image data based on whether each of the two counts is a relatively high number or a relatively low number. The application of Fujiwara formalizes this concept further by requiring particular thresholds. Thus, claim 3 is fully taught by the combination of Kumashiro and Fujiwara, as set forth below.

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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES A. THOMPSON whose telephone number is (571)272-7441. The examiner can normally be reached on 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on 571-272-7402. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/James A Thompson/  
Primary Examiner, Art Unit 2625

27 January 2009